

RECLAMATION

Managing Water in the West

Floodplain Soil Analysis

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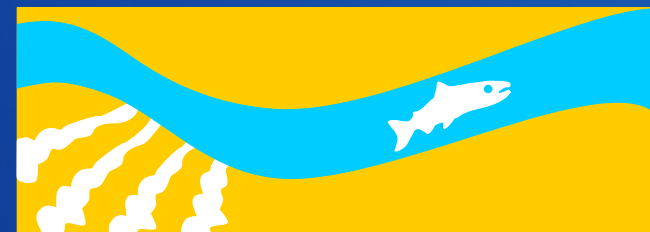
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U.S. Department of the Interior
Bureau of Reclamation

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SAN JOAQUIN RIVER
RESTORATION PROGRAM



Outline

- **Description of floodplain soil analysis to inform various SJRRP studies**
- **Types of sampling procedures and analysis**
- **Work completed to date**

Studies

- **Floodplain Suitability Study**

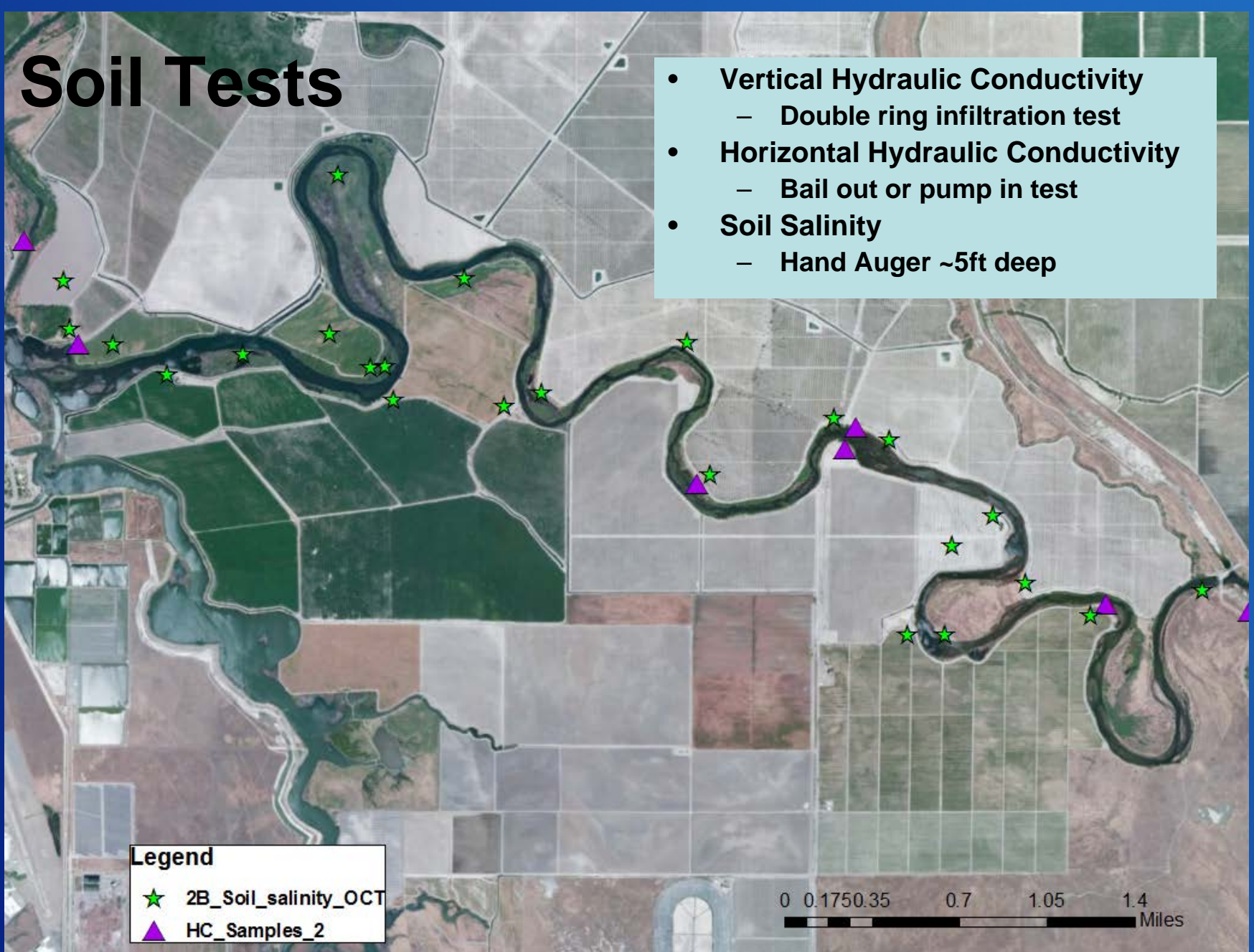


- **Restoration Revegetation**

- Irrigation for establishment of vegetation
 - Determination of water requirements
- Design of irrigation system

Soil Tests

- Vertical Hydraulic Conductivity
 - Double ring infiltration test
- Horizontal Hydraulic Conductivity
 - Bail out or pump in test
- Soil Salinity
 - Hand Auger ~5ft deep

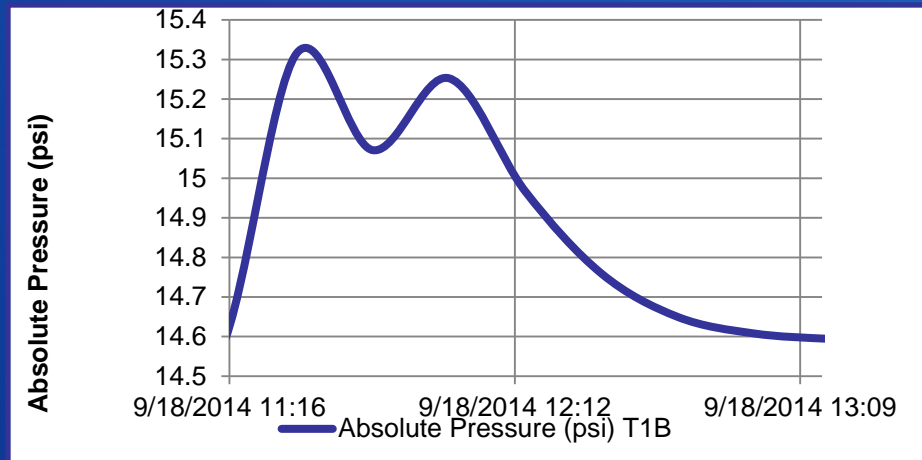
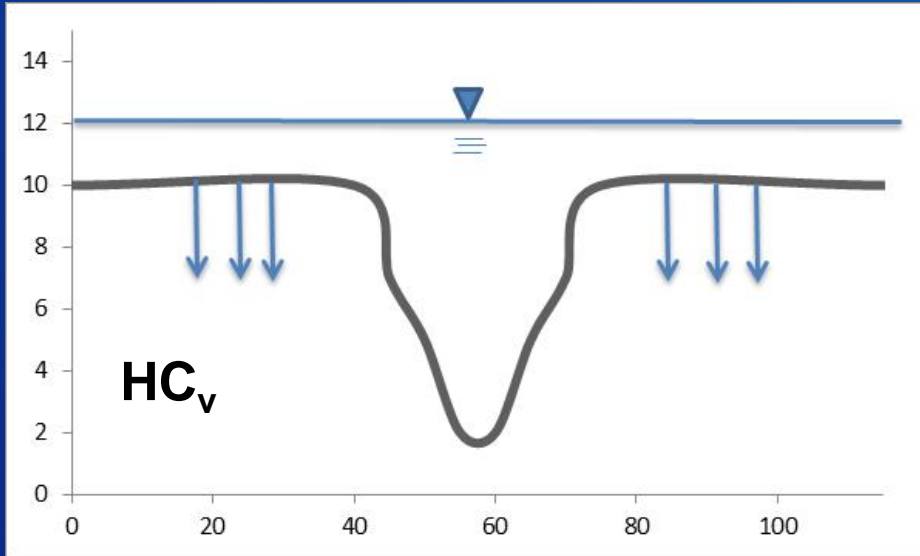


Legend

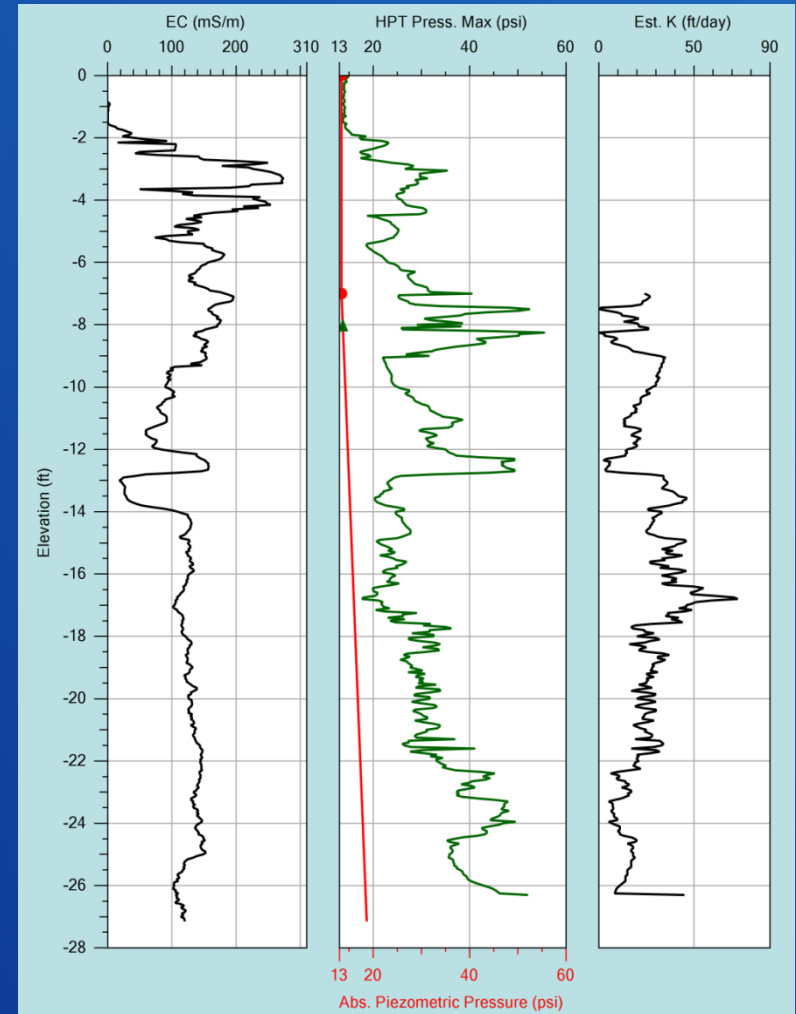
- ★ 2B_Soil_salinity_OCT
- ▲ HC_Samples_2

0 0.1750.35 0.7 1.05 1.4 Miles

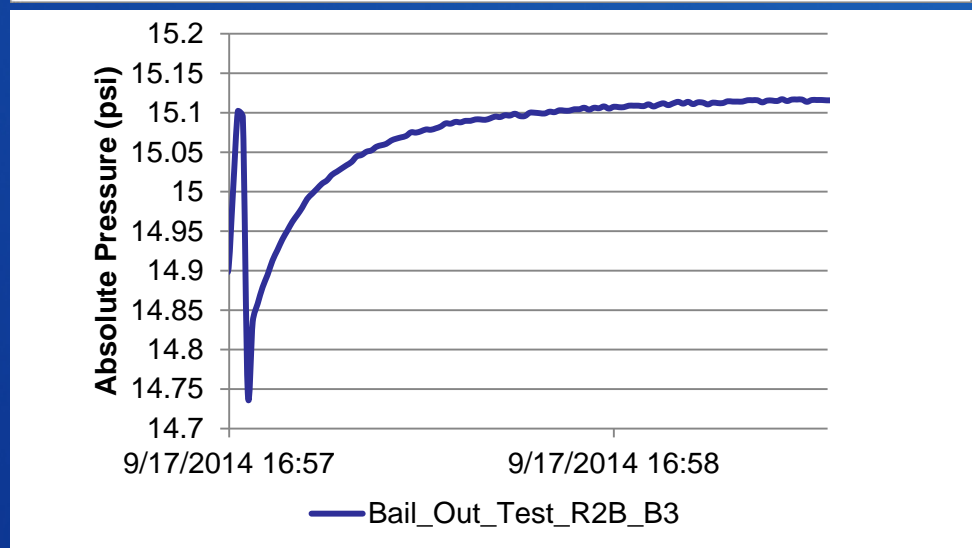
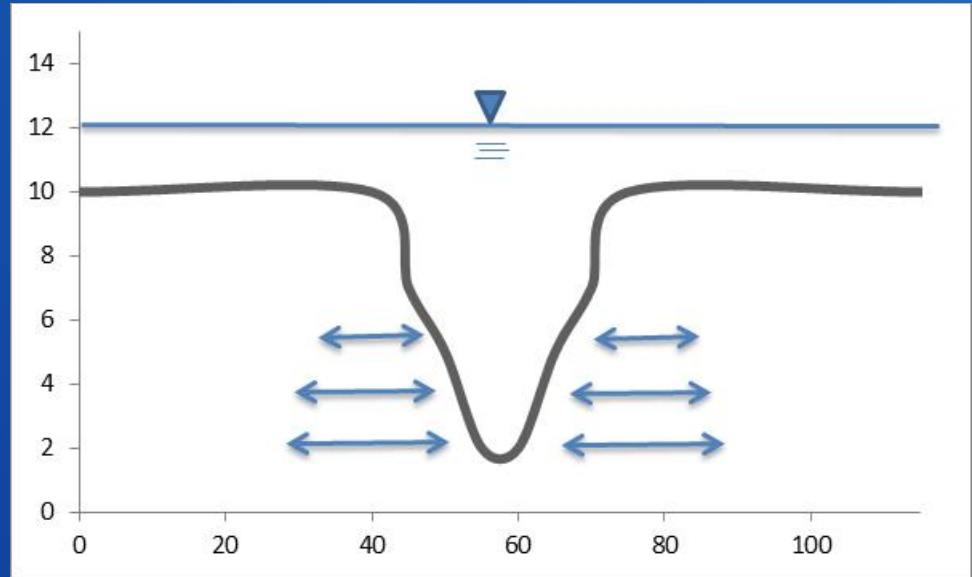
Vertical Hydraulic Conductivity (HC_v)



Hydraulic Profiling Tool (HPT)



Horizontal Hydraulic Conductivity (HC_h)



Conclusion

- **Floodplain soil sampling for**
 - **Hydraulic conductivity**
 - **Salinity**
- **Soil Salinity is currently underway**